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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,416	07/03/2003	Derek Shaeffer	BBNT-P030	2090
7590	11/02/2004		EXAMINER	
WAGNER, MURABITO & HAO LLP Third Floor Two North Market Street San Jose, CA 95113			SHINGLETON, MICHAEL B	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/613,416	SHAEFFER, DEREK
	Examiner	Art Unit
	Michael B. Shingleton	2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 August 2004.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 17-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 17 and 24-26 is/are rejected.
- 7) Claim(s) 18-23 and 27-33 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17 and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hill 5,699,021 (Hill).

Figure 2 and the relevant text discloses a structure and associated method for generating high frequency oscillations. This includes providing two oscillators 12 and 15 each of which has a gain element 14,16 and a non-linear element 13, 17. Note that the non-linear elements 13 and 17 are resonating circuits and thus are non-linear circuits with respect to frequency. The node directly connected to the antenna 11 forms both the first coupler and the second coupler. The claims have been amended such that the first coupler is for coupling compared to receiving a first signal and likewise the second coupler is for coupling compared to receiving a second signal. The first coupler does access the first signal “from” the first oscillator 12 at a point in between the output of the gain element 14 and the non-linear element 13. This is then coupled to the second oscillator 15 at a point between the output of the gain element 16 and the non-linear element 17. Likewise the node directly connected to the antenna is part of the second coupler as well. Note that the claims do not require totally separate couplers. Thus the second coupler does access the second signal “from” the second oscillator 15 at a point in between the output of the gain element 16 and the non-linear element 17. This is then coupled to the first oscillator 112 at a point between the output of the gain element 14 and the non-linear element 13.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill 5,699,021 (Hill).

The same reasoning as applied to claims 17 and 26 above and the following: Hill utilizes for the first and second coupler combination a direct connection to the antenna. Hill is silent on the use of a capacitive summing or resistive summing network for this coupler combination. However, alternatively, it is well known to utilize a capacitive or resistive summing network for the coupling as these coupling networks are art recognized equivalents to the direct connections employed by Hill. Furthermore, capacitive networks have the well-known advantage of blocking DC and resistive networks have the well-known advantage of limiting current.

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provide either a resistive or capacitive summing network to form the coupler combination as these networks are art recognized equivalent ways to couple a signal. One of ordinary skill in the art would have additionally been motivated to make the combination for the added well known advantage of blocking DC and the added well known advantage of limiting current that the capacitive and resistive summing networks offer.

Claims 18-23 and 27-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Shingleton whose telephone number is (571) 272-1770. The examiner can normally be reached on Tues-Fri from 8:30 to 4:30. The examiner can also be reached on alternate Mondays. The examiner normally has the second Mondays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal, can be reached on (571)272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MBS  
October 22, 2004

*Michael B. Shingleton*  
MICHAEL B. SHINGLETON  
PRIMARY EXAMINER  
GROUP/PART/INT 2817